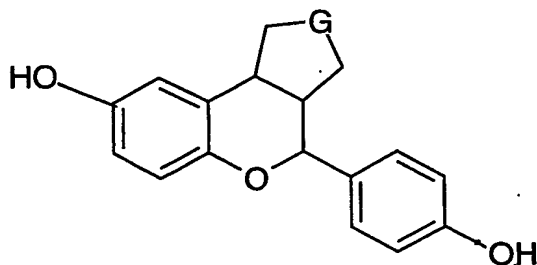


-112-

WE CLAIM:

1. A compound according to the formula:



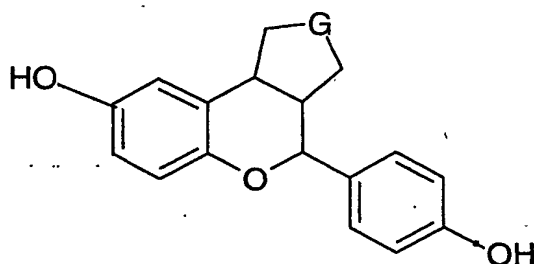
(I)

wherein

G is $\text{CHC}_1\text{-C}_6$ alkyl, C=O , CHOH , CF_2 , C(OH)CF_3 , CHCF_3 , $\text{CH(OH)C}_1\text{-C}_6$ alkyl, $\text{CH-OC}_1\text{-C}_6$ alkyl, $\text{CH-O(CO)C}_1\text{-C}_6$ alkyl, CHF , CHCN , $\text{CHC}_2\text{-C}_4$ alkenyl, $\text{CHC}_2\text{-C}_4$ alkynyl, CHbenzyl , difluoromethylene, O , S(O)_n , wherein n is 0-2;

including their enantiomers.

2. A compound according to the formula:



(II)

wherein

wherein G is $\text{CHC}_1\text{-C}_6$ alkyl, C=O , CHOH , CF_2 , C(OH)CF_3 , CHCF_3 , $\text{CH(OH)C}_1\text{-C}_6$ alkyl, $\text{CH-OC}_1\text{-C}_6$ alkyl, $\text{CH-O(CO)C}_1\text{-C}_6$ alkyl, CHF , O , S(O)_n , wherein n is 0-

2;

including the enantiomers;

and the pharmaceutically acceptable salts thereof.

- 5 3. A compound selected from the group comprising:
- a) (2*S*, 3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2-methyl-1,2,3,3*a*,4,9*b*-
 hexahydro-cyclopenta[*c*]chromen-8-ol;
- 10 b) (2*R*, 3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-2-methyl-1,2,3,3*a*,4,9*b*-
 hexahydro-cyclopenta[*c*]chromen-8-ol;
- c) (2*R*, 3*aR*, 4*S*, 9*bS*)- 2-tert-Butyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-
 hexahydro-cyclopenta[*c*]chromen-8-ol;
- d) (2*S*, 3*aS*, 4*R*, 9*bR*)-2-tert-Butyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-
 hexahydro-cyclopenta[*c*]chromen-8-ol;
- 15 e) (3*aS*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-1,3*a*,4,9*b*-tetrahydro-3*H*-2,5-
 dioxo-cyclopenta[*a*]naphthalen-8-ol;
- f) (3*aR*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-1,3*a*,4,9*b*-tetrahydro-3*H*-2,5-
 dioxo-cyclopenta[*a*]naphthalen-8-ol;
- g) (3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-1,3*a*,4,9*b*-tetrahydro-3*H*-5-
20 oxa-2-thia-cyclopenta[*a*]naphthalen-8-ol;
- h) (3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-1,3*a*,4,9*b*-tetrahydro-3*H*-5-
 oxa-2-thia-cyclopenta[*a*]naphthalen-8-ol;
- i) (2*S*, 3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-2-oxo-1,2,3,3*a*,4,9*b*-
 hexahydro-5-oxa-2 λ^4 -thia-cyclopenta[*a*]naphthalen-8-ol;
- 25 j) (2*R*, 3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2-oxo-1,2,3,3*a*,4,9*b*-
 hexahydro-5-oxa-2 λ^4 -thia-cyclopenta[*a*]naphthalen-8-ol;
- k) (3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-2,2-dioxo-1,2,3,3*a*,4,9*b*-
 hexahydro-5-oxa-2 λ^6 -thia-cyclopenta[*a*]naphthalen-8-ol;
- l) (3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2,2-dioxo-1,2,3,3*a*,4,9*b*-
30 hexahydro-5-oxa-2 λ^6 -thia-cyclopenta[*a*]naphthalen-8-ol;
- m) (3*aR*, 4*S*, 9*bS*)-8-Hydroxy-4-(4-hydroxy-phenyl)-1,3*a*,4,9*b*-
 tetrahydro-3*H*-cyclopenta[*c*]chromen-2-one;
- n) (3*aS*, 4*R*, 9*bR*)-8-Hydroxy-4-(4-hydroxy-phenyl)-1,3*a*,4,9*b*-
 tetrahydro-3*H*-cyclopenta[*c*]chromen-2-one;
- 35 o) (2*S*, 3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-
 cyclopenta[*c*]chromene-2,8-diol;

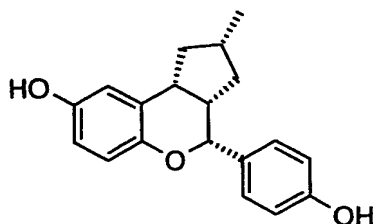
- 5 p) (2*R*, 3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromene-2,8-diol;
- q) (3*aR*, 4*S*, 9*bS*)-2,2-Difluoro-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 10 r) (3*aS*, 4*R*, 9*bR*)-2,2-Difluoro-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- s) (2*S*, 3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-2-trifluoromethyl-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- t) (2*R*, 3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2-trifluoromethyl-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 15 u) (2*R*, 3*aS*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-2-trifluoromethyl-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- v) (2*S*, 3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2-trifluoromethyl-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- w) (2*R*, 3*aR*, 4*S*, 9*bS*)-2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*bR*-hexahydro-cyclopenta[*c*]chromene-2,8-diol;
- 20 x) (2*S*, 3*aS*, 4*R*, 9*bR*)-2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*bR*-hexahydro-cyclopenta[*c*]chromene-2,8-diol;
- y) (2*S*, 3*aS*, 4*R*, 9*bR*)-2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 25 z) (2*S*, 3*aR*, 4*S*, 9*bS*)-2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- aa) (2*S*, 3*aR*, 4*S*, 9*bS*)-2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- bb) (2*R*, 3*aR*, 4*S*, 9*bS*)-2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 30 cc) (2*S*, 3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2-methoxy-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- dd) (2*R*, 3*aR*, 4*S*, 9*bS*)-4-(4-Hydroxy-phenyl)-2-methoxy-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 35 ee) (2*S*, 3*aS*, 4*R*, 9*bR*)-Acetic acid 8-hydroxy-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-2-yl ester;

- 5 ff) (2*R*, 3*aR*, 4*S*, 9*bS*)-Acetic acid 8-hydroxy-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-2-yl ester;
- gg) (2*R*, 3*aS*, 4*R*, 9*bR*)-2-Fluoro-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- hh) (2*S*, 3*aR*, 4*S*, 9*bS*)-2-Fluoro-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 10 ii) (2*S*, 3*aS*, 4*R*, 9*bR*)- 2-Fluoro-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- jj) (2*R*, 3*aR*, 4*S*, 9*bS*)-2-Fluoro-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 15 kk) (2*R*, 3*aR*, 4*S*, 9*bS*)- and (2*S*, 3*aS*, 4*R*, 9*bR*)-8-Hydroxy-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromene-2-carbonitrile;
- ll) (2*S*, 3*aR*, 4*S*, 9*bS*)- and (2*R*, 3*aS*, 4*R*, 9*bR*)-8-Hydroxy-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromene-2-carbonitrile;
- mm) (3*aR*, 4*S*, 9*bS*)- and (3*aS*, 4*R*, 9*bR*)-4-(4-Hydroxy-phenyl)-2-methylene-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 20 nn) (3*aR*, 4*S*, 9*bS*)- and (3*aS*, 4*R*, 9*bR*)-2-Difluoromethylene-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- oo) (3*aR*, 4*S*, 9*bS*)- and (3*aS*, 4*R*, 9*bR*)-2-Ethynyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 25 pp) 2-Butyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- qq) 4-(4-Hydroxy-phenyl)-2-propyl-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- rr) 2-Ethyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;
- 30 ss) 2-Benzyl-4-(4-hydroxy-phenyl)-1,2,3,3*a*,4,9*b*-hexahydro-cyclopenta[*c*]chromen-8-ol;

including the enantiomers thereof.

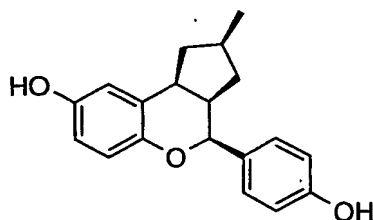
-116-

- 5 4. A compound according to claim 1 wherein the compound is of the formula:



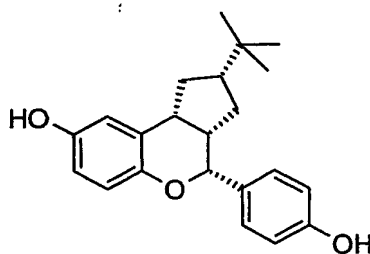
and the enantiomers thereof.

- 10 5. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

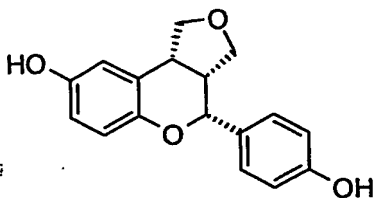
- 15 6. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

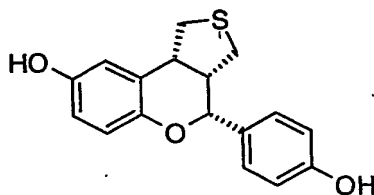
-117-

- 5 7. A compound according to claim 1 wherein the compound is of the
formula:



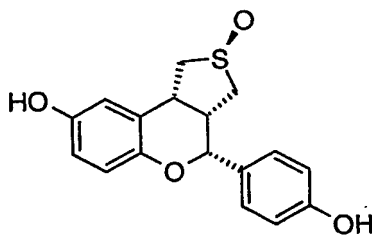
and the enantiomers thereof.

- 10 8. A compound according to claim 1 wherein the compound is of the
formula:



and the enantiomers thereof.

- 15 9. A compound according to claim 1 wherein the compound is of the
formula:

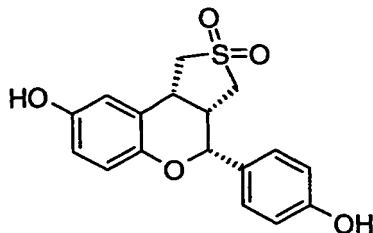


and the enantiomers thereof.

20

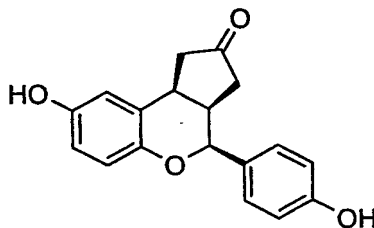
-118-

- 5 10. A compound according to claim 1 wherein the compound is of the formula:



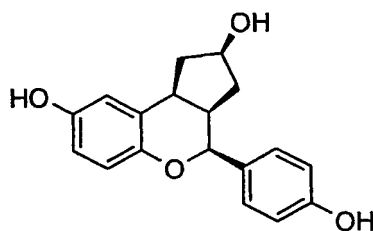
and the enantiomers thereof.

- 10 11. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

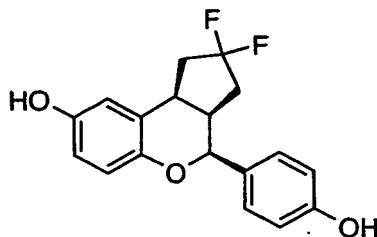
- 15 12. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

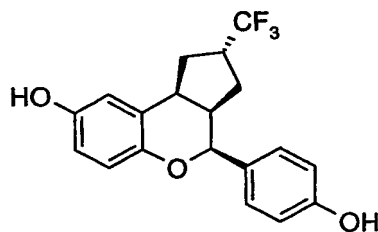
-119-

- 5 13. A compound according to claim 1 wherein the compound is of the formula:



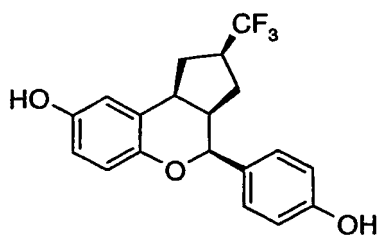
and the enantiomers thereof.

- 10 14. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

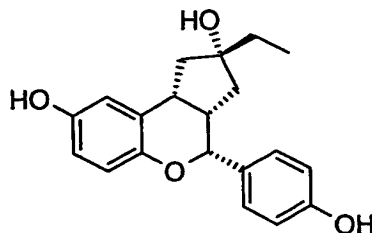
- 15 15. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

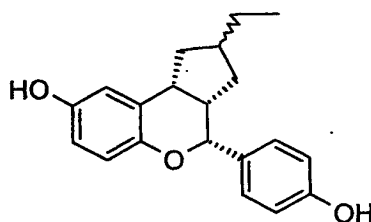
-120-

- 5 16. A compound according to claim 1 wherein the compound is of the formula:



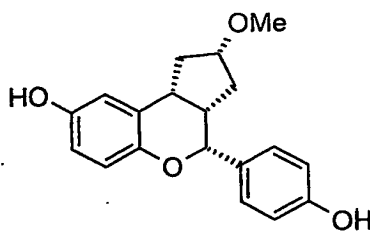
and the enantiomers thereof.

- 10 17. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

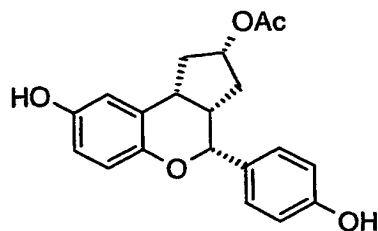
- 15 18. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

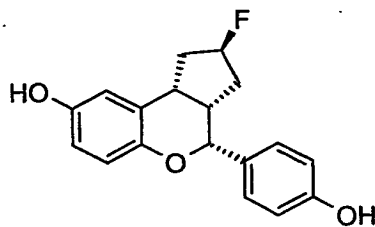
-121-

- 5 19. A compound according to claim 1 wherein the compound is of the formula:



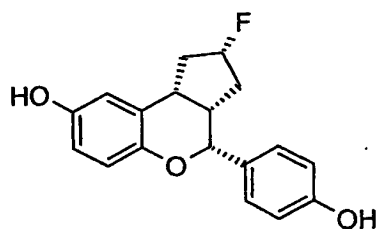
and the enantiomers thereof.

- 10 20. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

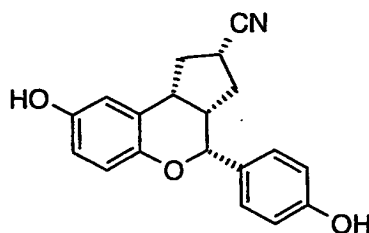
- 15 21. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

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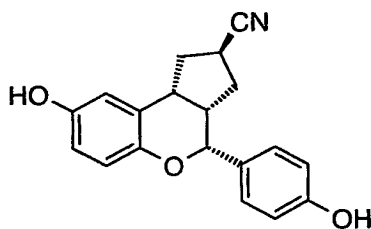
- 5 22. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

10

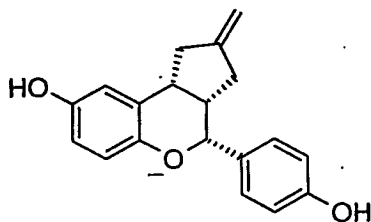
23. A compound according to claim 1 wherein the compound is of the formula:



15

and the enantiomers thereof.

24. A compound according to claim 1 wherein the compound is of the formula:

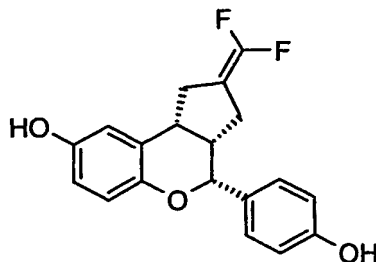


and the enantiomers thereof.

25

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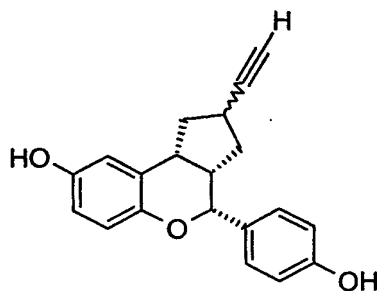
- 5 25. A compound according to claim 1, wherein the compound is of the formula:



and the enantiomers thereof.

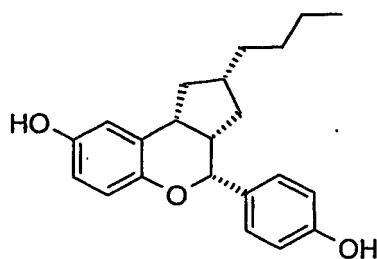
10

26. A compound according to claim 1 wherein the compound is of the formula:



15 and the enantiomers thereof.

27. A compound according to claim 1 wherein the compound is of the formula:

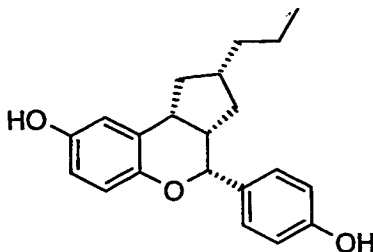


20

and the enantiomers thereof.

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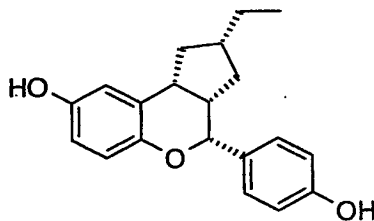
- 5 28. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

10

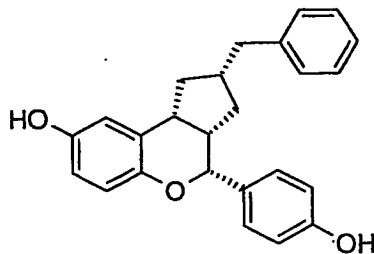
29. A compound according to claim 1 wherein the compound is of the formula:



and the enantiomers thereof.

15

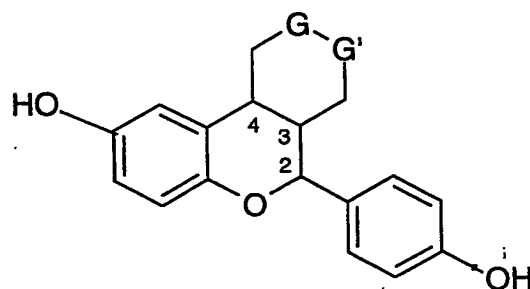
30. A compound according to claim 1 wherein the compound is of the formula:



20 and the enantiomers thereof.

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5 31. A compound according of the formula II:



(II)

wherein:

10 G and G' are each CH₂, C=O, C=CH₂, CHC₁-C₆alkyl or CF₂; with the proviso that when G' is other than CH₂, G must be CH₂ and that when G is other than CH₂, G' must be CH₂;

including the enantiomers and the pharmaceutically acceptable salts thereof.

32. A compound selected from the group comprising:

15

a. (6S, 6aR, 10aS)-2-Hydroxy-6-(4-hydroxy-phenyl)-6,6a,7,8,10,10a-hexahydro-benzo[c]chromen-9-one;

b. (6aR, 6S, 10aS)-6-(4-Hydroxy-phenyl)-9-methylene-6a,7,8,9,10,10a-hexahydro-6H-benzo[c]chromen-2-ol;

20

c. (6aR, 6S, 9S, 10aS)-6-(4-Hydroxy-phenyl)-9-methyl-6a,7,8,9,10,10a-hexahydro-6H-benzo[c]chromen-2-ol;

d. (6aR, 6S, 9R, 10aS)-6-(4-Hydroxy-phenyl)-9-methyl-6a,7,8,9,10,10a-hexahydro-6H-benzo[c]chromen-2-ol;

25

e. (6aR, 6S, 10aS)-9,9-Difluoro-6-(4-hydroxy-phenyl)-6a,7,8,9,10,10a-hexahydro-6H-benzo[c]chromen-2-ol;

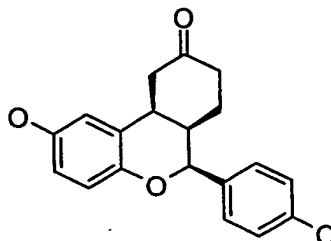
f. (6aR, 6S, 10aS)-2-Hydroxy-6-(4-hydroxy-phenyl)-6a,9,10,10a-tetrahydro-6H,7H-benzo[c]chromen-8-one;

including their enantiomers.

30

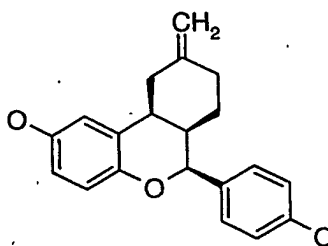
-126-

- 5 33. A compound according to claim 31 wherein the compound is of the formula:



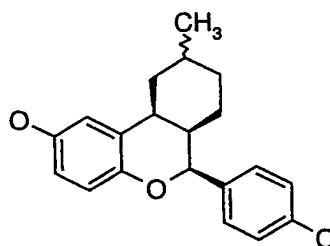
and the enantiomers thereof.

- 10 34. A compound according to claim 31 wherein the compound is of the formula:



and the enantiomers thereof.

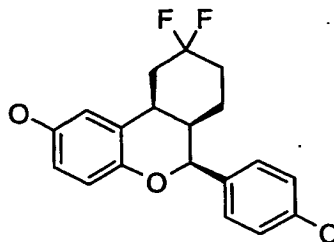
- 15 35. A compound according to claim 31 wherein the compound is of the formula:



and the enantiomers thereof.

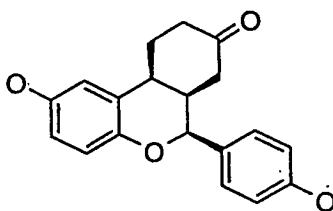
-127-

- 5 36. A compound according to claim 31 wherein the compound is of the formula:



and the enantiomers thereof.

- 10 37. A compound according to claim 31 wherein the compound is of the formula:



and the enantiomers thereof.

- 15 38. A pharmaceutical composition comprising a compound of according to any of Claims 1 through 37 and a pharmaceutically acceptable carrier.

39. A method of selectively binding to estrogen receptor beta in a patient in need thereof comprising administering to said patient a therapeutically effective amount
20 of a compound of any of Claims 1 through 38.

40. A method of treating a patient afflicted with an estrogen receptor beta mediated disease condition comprising administering to said patient a therapeutically effective amount of a compound of any of Claims 1 through 38.

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5 41. A method of treating prostate cancer in a patient in need thereof comprising administering to said patient a therapeutically effective amount of a compound of any of Claims 1 through 38.

10 42. A method of treating benign prostatic hyperplasia (BPH) in a patient in need thereof comprising administering to said patient a therapeutically effective amount of a compound of any of Claims 1 through 38.

 43. A method according to any of Claims 39-42 wherein said patient is a human.

15 44. Use of a compound according to any one of Claims 1 to 38 in the manufacture of a medicament for the treatment of prostate cancer, benign prostatic hyperplasia, or an estrogen receptor beta mediated disease condition.

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